

JC20 Rec'd PCT/PTO 27 MAY 2005  
SEQUENCE LISTING

<110> ITOHAM FOODS INC.

<120> A peptide and a pharmaceutical composition containing the peptide

<130> PH-1938-PCT

<150> JP2002/344523

<151> 2002-11-27

<160> 34

<170> PatentIn Ver. 2.0

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<212> PRT

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<220>

<223> Description of Artificial Sequence: Synthetic Peptide

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<223> Xaa = Val or Ile

<220>

<221> VARIANT

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<223> Xaa = Asp, Glu or Ala

<220>

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<223> Xaa = Asn or Ser

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<223> Xaa = Thr or Ser

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<223> Xaa = Leu or Tyr

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<222> (15)

<223> Xaa = Lys or Arg

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<223> Xaa = Leu or nLeu

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<223> Xaa = Lys or Arg

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Leu-Gly-Lys-Lys, Leu-Gly-Lys-Arg, Leu-Gly-Arg-Arg,  
Leu-Gly-Lys-Arg-Tyr-Lys-Gln-Arg-Val-Lys-Asn-Lys or  
Leu-Gly-Arg-Arg-Tyr-Arg-Gln-Arg-Val-Arg-Asn-Arg

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His Ser Asp Ala Xaa Phe Thr Xaa Xaa Tyr Xaa Arg Xaa Arg Xaa Gln

1

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10

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Xaa Ala Val Xaa Xaa Tyr Leu Ala Ala Xaa Xaa

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln

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Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn

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His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Lys Gln

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Met Ala Val Lys Lys Tyr Leu Ala Ala Val Leu

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His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Lys Gln

1 5 10 15

Met Ala Val Lys Lys Tyr Leu Ala Ala Val Leu Gly Lys Arg Tyr Lys

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Gln Arg Val Lys Asn Lys

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1 5 10 15

Leu Ala Val Arg Arg Tyr Leu Asn Ser Ile Leu Asn Gly Arg Arg

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His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu Ala Ala Val Leu Gly Arg Arg

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His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln  
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Leu Ala Val Arg Arg Tyr Leu Ala Ala Val Leu Gly Arg Arg Tyr Arg  
20 25 30

Gln Arg Val Arg Asn Arg  
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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln  
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser  
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Met Ala Val Lys Lys Tyr Leu Asn Ser  
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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln  
1 5 10 15

Leu Ala Val Lys Lys Tyr Leu  
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Leu Ala Val Arg Arg Tyr Leu

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<223> AMIDATION

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln  
1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Ala Ala Ile Leu Asn  
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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln  
1 5 10 15

Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln

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15

Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln  
1 5 10 15

Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg  
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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln

1 5 10 15

Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln

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Xaa Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg

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<400> 18

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Lys

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg

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His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln  
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Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Lys Arg  
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His Ser Asp Ala Val Phe Thr Glu Asn Tyr Thr Arg Leu Arg Arg Gln  
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Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg  
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10

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Leu Ala Val Arg Arg Tyr Leu

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His Ser Asp Ala Val Phe Thr Ala Asn Tyr Thr Arg Leu Arg Arg Gln

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5

10

15

Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg

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His Ser Asp Ala Val Phe Thr Ala Asn Tyr Thr Arg Leu Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu

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His Ser Asp Ala Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu Ala Ala Val Leu Gly Arg Arg

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His Ser Asp Ala Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln

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His Ser Asp Ala Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln



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Leu	Ala	Val	Arg
Arg	Tyr	Leu	Ala
Ala	Val	Leu	Gly
Arg	Arg		
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<222> (38)

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His	Ser	Asp	Ala	Ile	Phe	Thr	Asp	Ser	Tyr	Ser	Arg	Tyr	Arg	Arg	Gln
1	5	10	15												

Leu	Ala	Val	Arg	Arg	Tyr	Leu	Ala	Ala	Val	Leu	Gly	Arg	Arg	Tyr	Arg
20	25	30													

Gln	Arg	Val	Arg	Asn	Arg
35					

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His Ser Asp Ala Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln

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Leu Ala Val Arg Arg Tyr Leu Ala Ala Ile Leu Gly Arg Arg Tyr Arg

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25

30

Gln Arg Val Arg Asn Arg

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Leu Ala Val Arg Arg Tyr Leu

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10

15

Leu Ala Val Arg Arg Tyr Leu

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His Ser Asp Gly Ile Phe Thr Asp Ser Tyr Ser Arg Tyr Arg Arg Gln

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15

Leu Ala Val Arg Arg Tyr Leu

20